

Claims:

1. (Currently Amended) A composition for supplementing the concentration of a parent androgen in a subject *in vivo*, the parent androgen having a skeletal structure including a 17 position and the parent androgen further having a 17 β -hydroxy group comprising a 17 β -hydroxy hydrogen appended to the 17 position, the composition comprising:

a substrate having the skeletal structure of the parent androgen including a 17 position corresponding to the 17 position of the parent androgen; and

a promoiety ~~comprising~~ consisting of an alkoxymethyl ether appended to the 17 position of the substrate as a substitute for the 17 β -hydroxy hydrogen.

2. (Previously Amended) A composition as set forth in claim 1, wherein the substrate has the skeletal structure of testosterone.

3. (Withdrawn) A composition as set forth in claim 1, wherein the substrate has the skeletal structure of nandrolone.

4. (Withdrawn) A composition as set forth in claim 1, wherein the substrate has the skeletal structure of dihydrotestosterone.

5. (Withdrawn) A composition as set forth in claim 1, wherein the substrate has the skeletal structure of dihydronandrolone.

6. (Withdrawn) A composition as set forth in claim 1, wherein the substrate has the skeletal structure of the parent androgen and wherein the parent androgen is selected from the group consisting of (5 α ,17 β)-17-hydroxy-androst-1-ene-3-one,

5 α -androst-1-ene-3 α ,17 β -diol, androst-4-ene-3 α ,17 β -diol, 5 α -androst-1-ene-3 β ,17 β -diol, androst-4-ene-3 β ,17 β -diol, and mixtures thereof.

7. (Withdrawn) A composition as set forth in claim 1, wherein the substrate has the skeletal structure of the parent androgen and wherein the parent androgen is selected from the group consisting of 5 α -19-nor-androst-1-ene-3 α ,17 β -diol, 19-nor-androst-4-ene-3 α ,17 β -diol, 5 α -19-nor-androst-1-ene-3 β ,17 β -diol, 19-nor-androst-4-ene-3 β ,17 β -diol and mixtures thereof.

8. (Previously Amended) A composition as set forth in claim 1, wherein the alkoxymethyl ether has an alkyl chain length of less than 11.

9. (Previously Amended) A composition as set forth in claim 1, wherein the alkoxymethyl ether has an alkoxy moiety consisting of methoxy.

10. (Previously Amended) A composition as set forth in claim 1, wherein the alkoxymethyl ether has an alkoxy moiety selected from the group consisting of ethoxy, butoxy, isopropoxy, isobutoxy t-butoxy, valeroxy, hexanoxo, heptanoxo, octanoxo, nonanoxo, decanoxo, undecanoxo, cyclopentoxo, cyclopentylpropoxo, and mixtures thereof.

11. (Withdrawn) A composition as set forth in claim 1, wherein the composition comprises (5 α ,17 β)-17-methoxymethyloxyandrost-1-ene-3-ol.

12. (Withdrawn) A composition as set forth in claim 1, wherein the composition comprises 17 β -methoxymethyloxyandrost-4-ene-3-ol.

13. (Withdrawn) A composition as set forth in claim 1, wherein the composition comprises (5 α ,17 β)-17-methoxymethyloxyandrost-1-ene-3-one.

14. (Previously Amended) A composition as set forth in claim 1, wherein the composition comprises 17 β -methoxymethyloxyandrost-4-ene-3-one.

15. (Withdrawn) A composition as set forth in claim 1, wherein the composition comprises 17 β -methoxymethyloxyandrost-1,4-diene-3-one.

16. (Cancelled) A composition as set forth in claim 1, wherein the composition comprises (5 α ,17 β)-17-methoxymethylestra-1-ene-3-one.

17. (Cancelled) A composition as set forth in claim 1, wherein the composition comprises 17 β -methoxymethylestr-4-ene-3-one.

18. (Cancelled) A composition as set forth in claim 1, wherein the composition comprises 17 β -methoxymethylestr-1-ene-3-ol.

19. (Cancelled) A composition as set forth in claim 1, wherein the composition comprises 17 β -methoxymethylestr-4-ene-3-ol.

20. (Cancelled) A composition as set forth in claim 1, wherein the composition comprises (5 α -17 β)-17-methoxymethylandrostan-3-one.

21. (Cancelled) A composition as set forth in claim 1, wherein the composition comprises (5 α -17 β)-17-methoxymethylestran-3-one.

22. (Previously Amended) A composition as set forth in claim 1, further including a carrier.

23. (Previously Amended) A composition as set forth in claim 1, wherein the carrier comprises a solid carrier.

24. (Previously Amended) A composition as set forth in claim 1, wherein the carrier comprises a liquid carrier.

25. (Previously Amended) A composition as set forth in claim 1, wherein the carrier comprises a semi-solid carrier.

26. (Currently Amended) A method for increasing concentration of a parent androgen in a subject *in vivo*, the parent androgen having a skeletal structure including a 17 position and the parent androgen further having a 17 β -hydroxy group comprising a 17 β -hydroxy hydrogen appended at the 17 position, the method comprising:

administering to the subject a composition comprising a substrate and a promoiety, the substrate having the skeletal structure of the parent androgen including a 17 position corresponding to the 17 position of the parent androgen, and the promoiety ~~comprising~~ consisting of an alkoxymethyl ether substituted at the 17 position of the substrate for the 17 β -hydroxy hydrogen; and

converting the composition *in vivo* into the parent androgen.

27. (Previously Amended) A method as set forth in claim 26, wherein the subject is a human being and the *in vivo* conversion comprises converting the composition into the parent androgen *in vivo* within the human being.

28. (Previously Amended) A method as set forth in claim 26, wherein the composition administration comprises administering the composition so that the substrate has the skeletal structure of testosterone.

29. (Withdrawn) A method as set forth in claim 26, wherein the composition administration comprises administering the composition so that the substrate has the skeletal structure of nandrolone.

30. (Withdrawn) A method as set forth in claim 26, wherein the composition administration comprises administering the composition so that the substrate has the skeletal structure of dihydrotestosterone.

31. (Withdrawn) A method as set forth in claim 26, wherein the composition administration comprises administering the composition so that the substrate has the skeletal structure of dihydronandrolone.

32. (Withdrawn) The method as set forth in claim 26, wherein the composition administration comprises administering the composition so that the substrate has the skeletal structure of the parent androgen wherein the parent androgen is selected from the group consisting of (5 α ,17 β)-17-hydroxy-androst-1-ene-3-one,

5 α -androst-1-ene-3 α ,17 β -diol, androst-4-ene-3 α ,17 β -diol, 5 α -androst-1-ene-3 β ,17 β -diol, androst-4-ene-3 β ,17 β -diol, and mixtures thereof.

33. (Withdrawn) A method as set forth in claim 26, wherein the composition administration comprises administering the composition so that the substrate has the skeletal structure of at least one of 5 α -19-nor-androst-1-ene-3 α ,17 β -diol, 19-nor-androst-4-ene-3 α -17 β -diol, 5 α -19-nor-androst-1-ene-3 β ,17 β -diol,19-nor-androst-4-ene-3 β ,17 β -diol.

34. (Original) A method as set forth in claim 26, wherein the alkoxymethyl ether has an alkyl chain length of less than 11.

35. (Original) A method as set forth in claim 26, wherein the alkoxymethyl ether has an alkoxy moiety consisting of methoxy.

36. (Original) A method as set forth in claim 26, wherein the alkoxymethyl ether has an alkoxy moiety selected from the group consisting of ethoxy, butoxy, isopropoxy, and isobutoxy, t-butoxy, valeroxy, hexanoxy, heptanoxy, octanoxy, nonanoxy, decanoxy, undecanoxy, cyclopentoxo, cyclopentylpropoxy, and mixtures thereof.

37. (Original) A method as set forth in claim 26, wherein the alkoxymethyl ether comprises methoxymethyl ether.

38. (Withdrawn) A method as set forth in claim 26, wherein the composition comprises 17 β -methoxymethyloxyandrost-1-ene-3-ol.

39. (Withdrawn) A method as set forth in claim 26, wherein the composition comprises (5 α ,17 β)-17-methoxymethyloxyandrost-4-ene-3-ol.

40. (Withdrawn) A method as set forth in claim 26, wherein the composition comprises (5 α ,17 β)-17-methoxymethyloxyandrost-1-ene-3-one.

41. (Previously Amended) A method as set forth in claim 26, wherein the composition comprises 17 β -methoxymethyloxyandrost-4-ene-3-one.

42. (Withdrawn) A method as set forth in claim 26, wherein the composition comprises 17 β -methoxymethyloxyandrost-1,4-diene, 3-one.

43. (Withdrawn) A method as set forth in claim 26, wherein the composition comprises (5 α ,17 β)-17 β -methoxymethylestr-1-ene-3-one.

44. (Withdrawn) A method as set forth in claim 26, wherein the composition comprises 17 β -methoxymethylestr-4-ene-3-one.

45. (Withdrawn) A method as set forth in claim 26, wherein the composition comprises 17 β -methoxymethylestr-1-ene-3-ol.
46. (Withdrawn) A method as set forth in claim 26, wherein the composition comprises 17 β -methoxymethylestr-4-ene-3-ol.
47. (Withdrawn) A method as set forth in claim 26, wherein the composition comprises (5 α -17 β)-17-methoxymethylandrostan-3-one.
48. (Withdrawn) A method as set forth in claim 26, wherein the composition comprises (5 α -17 β)-17-methoxymethylestran-3-one.
49. (Previously Amended) A method as set forth in claim 26, wherein the composition administration comprises peroral administration.
50. (Previously Amended) A method as set forth in claim 26, wherein the composition administration comprises pernasal administration.
51. (Previously Amended) A method as set forth in claim 26, wherein the composition administration comprises transdermal administration.
52. (Previously Amended) A method as set forth in claim 26, wherein the composition administration comprises injecting the compound into the subject.
53. (Previously Amended) A method as set forth in claim 26, wherein the composition administration comprises administering the compound sublingually.
54. (Previously Amended) A method as set forth in claim 26, wherein the composition administration comprises complexing the composition with an hydroxypropyl beta cyclodextrin.

55. (Previously Amended) A method as set forth in claim 26, wherein the composition administration comprises complexing the composition with an hydroxypropyl gamma cyclodextrin.

56. (Previously Amended) A method as set forth in claim 26, wherein the composition administration comprises administering a dosage periodically for a maximum of two weeks, followed by at least two weeks of non-administration to permit recovery of natural parent androgen production in the subject.

57. (Previously Amended) A method as set forth in claim 26, wherein the composition administration comprises administering the composition only in morning-time.

58. (Previously Amended) A method as set forth in claim 26, wherein the composition administration comprises administering the composition in an amount ranging from 1.0 mg to 500 mg per day.

59. (Previously Amended) A method as set forth in claim 26, wherein the composition administration comprises administering the composition in an amount ranging from 50 mg to 300 mg per day.

60. (Previously Amended) A method as set forth in claim 26, wherein the composition administration comprises administering the composition in an amount ranging from 50 mg to 100 mg per day.

61. (Previously Amended) A method as set forth in claim 26, wherein the composition administration further includes applying an enteric coating to the composition prior to administering the compound.